Henry Hoffman Landfill
LPC# 1958130002
Whiteside County
SF/HRS

CERCLA Site Reassessment

Prepared by:
Office of Site Evaluation
Division of Remediation Management
Bureau of Land

SIGNATURE PAGE

Title: CERCLA Site Reassessment for Henry Hoffman Landfill

Preparer: **Tony Wasilewski**, Project Manager, Office of Site Evaluation, Illinois Environmental Protection Agency

Signature _____ Date 9-14-17

Approval: **Patrick Hamblin**, NPL Coordinator, United States Environmental Protection Agency, Region 5

Signature _____ Date 9/14/2017

The approval signatures on this page indicate that this document has been authorized for information release to the public through appropriate channels. No other forms or signatures are required to document this information release.

TABLE OF CONTENTS

FIGURES

APPENDICES

Section 1.0 Introduction

On January 7, 2016, the Illinois Environmental Protection Agency's (Illinois EPA) Office of Site Evaluation was tasked by the United States Environmental Protection Agency (U.S. EPA) Region V to conduct a Site Reassessment (SR) at the Henry Hoffman Landfill site in Rock Falls, Whiteside County, Illinois. Henry Hoffman Landfill is located on Antec Road, Rock Falls, IL 61071.

The Site Reassessment is performed under the authority of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) commonly known as Superfund. Current U.S. EPA policy stipulates that a Site Reassessment be conducted to determine the current status of the Henry Hoffman Landfill Site. The Site Reassessment will consist of an evaluation of recent information to determine if further Superfund investigations are warranted. The Site Reassessment will supplement previous work, and is not intended to replace previous CERCLA assessments.

The Site Reassessment is designed to evaluate recent information that will help determine if the site qualifies for possible inclusion on the National Priorities List (NPL), or should receive a No Further Remedial Action Planned (NFRAP) designation. At the conclusion of the reassessment process Illinois EPA will recommend that the site be given a NFRAP designation, receive further Superfund investigations, or referred to another state or federal cleanup program.

The Site Reassessment Report will describe current site conditions and illustrate how the site has changed since the last CERCLA investigation in 1994. This report will contain a summary of existing information that will include site history, current site conditions, evaluate past analytical data, and evaluate past remedial activities. The Site Reassessment will also support emergency response or time-critical removal activities if they are warranted.

Section 2.0 Site Description and History

2.1 Site Description

The Henry Hoffman Landfill Site occupies approximately five acres and is located on Antec Road, Rock Falls, IL approximately ¼ North of Route 30 (Figure 2). The landfill is part of a property that consists of approximately 5 acres located in the west central half of Section 29, and the east central half of Section 30, Township 21 North, and Range 7 East of the third principal meridian. The coordinates at the entrance to the property is 41.776708 latitude and -89.725262 longitude. Agricultural crop land surrounds the site to the west, north and northeast. The nearest resident is located approximately 0.50 mile to the south. Directly south of the landfill is a water filled gravel pit that is approximately 10 acres in size that is used for fishing. An unknown business is located to the south as well.

The site is approximately one-third of a mile west of the Rock River and approximately 1 mile west of Rock Falls. The site topography has a slight slope to the north (Figure 3). The northern edge of the site is a steep slope that levels off to a flat flood plain of the Rock River. The landfill was covered with grass and did not have any gas vent pipes present. No liner is present as well. No visible remnants of a former landfill are present on the property and there was no evidence of waste or leachate seeps.

The Henry Hoffman Landfill is underlain by Quaternary-age alluvium deposits and consists of unconsolidated deposits of poorly sorted sand, silt, and clay containing local deposits of sandy gravel (Lineback 1979, IEPA 1991). Alluvial deposits vary in thickness between 10 and 130 feet (IEPA 1991). Silurian-age dolomite lies directly beneath and interconnects with the alluvial deposits in the site area and most of Whiteside County. The dolomite is light gray in color and generally abundant, with water-bearing cracks and joints.

The Maquoketa shale lies directly below the Silurian dolomite in the site area and generally 150 to 200 feet thick (Foster 1956). The shale layer is thought to act as an aquitard, preventing the downward migration of water from overlying units to deeper water-bearing units. Lying beneath the Maquoketa shale is the Galena-Platteville dolomite; the average thickness is about 375 feet (Foster 1956). Locally, water is obtained from water-filled cracks and crevices, but water quality tends to be low because of high silt content within cracks and joints.

The city of Rock Falls has four community wells located approximately 1.5 and 2.5 miles of the site, although two of these wells is abandoned and not maintained for future use. There are also approximately 415 ISGS wells, of which some are drinking water wells, located within a four-mile radius of the site and the nearest school, Rock Falls Township High School, is approximately 1 mile to the east (Figure 4). The majority of nearby private wells are finished in sands and gravels of glacial drift known as Cahokia Alluvium and limestone of the Pennsylvanian System commonly known as Silurian dolomite.

2.2 Site History

In 1951 Henry Hoffman purchased the land and used it until the early 1970s for farming and grazing. In the early 1970s Mr. Hoffman leased a section of his land to Nelson Sand and Gravel, Prescott Construction, and Associated Asphalt Company (AAC).

Nelson Sand and Gravel excavated three large gravel pits onsite. They were 1 acre, 3 acres and 10 acres in size. In the early 1980s, Nelson Sand and Gravel Company and Prescott Construction closed, leaving only AAC operating the pits on the property. After that, Mr. Hoffman allowed local contractors to dispose of road construction and building demolition debris in the two smaller, unlined, water filled gravel pits. Wetlands now surround these pits. Drums of slaughterhouse waste from Rock River Provision Co. and Hoffman's household wastes were also disposed in the gravel pits. It was also noted at the time that according to Mr. Hoffman,

unauthorized dumping had occurred as well. In 1985 Mr. Hoffman allowed local contractors to dispose certain solid materials to the two smaller gravel pits free of charge. He never considered these to be landfills and thus, never had them permitted.

Materials deposited at the landfill included drums, metal, wood, shingles, cement and road materials. The drums came from the Hoffman's slaughter house. The slaughter house used the drums to hold bones. Mr. Hoffman mentioned in a letter that people were sneaking into the site with undesirable fill. According to Mr. Hoffman, the majority of drums at the site came from Mr. Hoffman's slaughter house and contained bones. Demolition debris from several local buildings was also taken to Henry Hoffman Landfill.

On October 17, 1987, representatives of the Illinois Environmental Protection Agency (Illinois EPA) responded to a complaint by conducting an investigation at Henry Hoffman Landfill. The complainant said various materials, especially demolition debris, were being accepted at the site. No available information suggested that hazardous waste was deposited into the pits. Some of the regulations of the Illinois Administrative Code which were observed being violated include refuse dumped into standing water, no personnel or equipment on site, no gates or fencing, open burning of wastes on site. There were no indications of a daily cover. The two pits were filled in

On April 28, 1988, Illinois EPA Representatives returned to the site to discuss items that needed to be addressed by a closure plan. Among those discussed were the need to control access to the site, seeding, grading of the property, and the installation of groundwater monitoring wells. By November 30, 1988, the closure plan had been activated and no excavation was required. The northern pit had been filled and had vegetative growth on its surface. The southern pit was in the process of being filled with clean material. And the 10-

acre pit exists to this day. A cable fence and a lock were installed at the main entrance in order to control access to the site.

The groundwater monitoring wells were installed by August 1989. The wells consisted of one background well, G101, and two downgradient wells, G102 and G103 (Appendix A). The first of the groundwater samples were collected August 31, 1989. The groundwater results did not show any traces of Volatile Organic Compounds (VOCs). The initial sampling and the three subsequent sampling events indicated calcium, chromium, magnesium, manganese, zinc and sulfate as being at significantly higher levels in the downgradient wells when compared to the background well. No MCLs were exceeded.

Henry Hoffman Landfill ceased accepting clean fill on October 12, 1990. As part of closure, the site was graded for proper drainage. The closure process was monitored by the Illinois EPA field inspectors. Representatives of the Illinois EPA's Permit Section and Enforcement Section instructed Mr. Hoffman what needed to be addressed in the closure process. On October 19, 1990, the landfill along with the gravel pits received final cover and the seeding was finished. The site has been inactive since 1990.

2.3 CERCLA Investigative History

The Henry Hoffman Landfill was originally placed on the Superfund Enterprise Management System (SEMS) on August 28, 1990. The Discovery Action was the result of an unpermitted landfill receiving fill of a questionable nature.

The site received its initial Comprehensive Environmental Response, Compensation and Liability Act evaluation in the form of a Preliminary Assessment (PA) report completed by the Illinois Environmental Protection Agency (Illinois EPA) on September 9, 1991. Due to the fact

that past activities included placement of materials directly into surface water bodies that were classified as wetlands, the use of a nearby surface waterbody as a fishery, minimal supervision at an active site, and the fill material being of questionable nature, it was recommended in the PA that the site advance to a Screening Site Inspection (SSI).

The sampling portion of the SSI was conducted on August 24, 1993. During the SSI, six soil samples, four groundwater samples from the sand and gravel aquifer, and four sediment samples were collected (see tables below). Results indicated that arsenic, barium, cobalt, copper, iron, manganese, and selenium were detected in groundwater, but at levels below Class 1 groundwater standards. According to the SSI it was given a high priority and recommended for further sampling due to seven inorganic analytes found in the groundwater. There were eight organic and 16 inorganic analytes in the sediment. The pathways of concern in the SSI included the groundwater pathway and the surface water pathway. The initial results of the monitoring well data was not replicated or reproduced in the 20 plus years of subsequent groundwater sampling.

Key Sample Summary for SSI **Groundwater ug/L**				
Substance	**GW01**	**GW02**	**GW03**	**GW04** **Background**
Arsenic	38.4		7.4 B	1 U
Barium	241		146 B	41.2 B
Cobalt	15.8 B			6 U
Copper	14.4 B		7.3 B	4 U
Iron	50,600 J			78.4 J,B

Manganese	5940			672
Selenium		2.4 J,B,N,W		1 U,N,J

Key Sample Summary for SSI Sediments (mg/kg)			
Substance	**ST02**	**ST03** **Background**	**ST04**
Phenanthrene	0.940	0.430 U	
Fluoranthene	0.950	0.080 J	
Benzo(a)Anthracene	0.460	0.044 J	
Chrysene	0.460	0.049 J	
Benzo(b)Fluoranthene	0.410	0.041 J	
Benzo(a)Pyrene	0.400	0.049 J	
Dieldrin		0.0043 U	0.0087 P
Endrin Aldehyde		0.0043 U	0.012 P
Aluminum	7490	1980	16600
Arsenic		1.4 B	6.0 S
Barium	107	15.8 B	177
Beryllium	0.45B	0.25 U	0.88 B
Cadmium		1.00 U	2.0
Chromium	33.5	6.1	27.7
Cobalt	8 B	2.0 B	10.7 B
Copper	14.8	4.4 B	26.4
Iron	13,000 *	3920 *	21600 *

Lead	38.1 S	7.0 S	30.5 S
Manganese	855 JN*	90.7 JN*	984 JN*
Nickel		6.0 B	22.2
Potassium		259 B	1810
Vanadium	21.7	6.7 B	35
Zinc		21.4	121

Key Sample Summary for SSI

Soil (mg/kg)

Substance	**SS01**	**SS02**	**SS03**	**SS04**	**SS05**	**SS06 Background**
Acetone	0.015	0.020		0.017		0.012 U
Toluene					0.360 D	0.120
Calcium		18900	16200	12100	69600	3520
Magnesium		11100	9890		40700	3000

Notes: **U** **Substance is undetected. The reported value is the contract required quantitation limit (CRQL) for organics or the contract required detection limit (CRDL) for inorganics.**

J **Reported value is estimated.**

B **Reported value less than the CRDL, but greater than the instrument detection limit.**

N **Spiked sample recovery not within control limits.**

S **Reported value determined by the Method of Standard Additions.**

W **Post-digestion spike for Furnace AA analysis is out of control limits; although sample absorbance is less than 50% of spike absorbance.**

D **Reanalyzed at a higher dilution factor.**

Duplicate analysis not within control limits.

P Greater than 25% difference for detected concentrations between the two GC columns

Section 3.0 Other Cleanup Authorities and Activities

In 1988 the Henry Hoffman Landfill property was addressed in the Illinois EPA Land Pollution Control Permit Section. A landfill closure plan was created to address access to the site, finish covering and regrading the site, and conduct a groundwater monitoring investigation. Three groundwater monitoring wells were installed. The groundwater monitoring investigation was scheduled to last for three years to comply with closure proceedings which started in October 1988. Following the closure certification approval, the groundwater post closure monitoring was to continue for another 5 years. During the 5-year post closure period semi-annual inspections were conducted to ensure proper maintenance of the landfill. A Certificate of Closure for the Henry Hoffman Landfill was approved by Illinois EPA on May 1, 1991. The Environmental Protection Act was amended to include 15-years post closure monitoring of the groundwater, which started on October 19, 1990 to identify any potential releases from the site and demonstrate compliance with the applicable groundwater quality standards. Financial assurance was also required during this 15-year period. Quarterly sampling results for the monitoring wells were submitted to the Illinois EPA once a year on July 15. Once a year they were required to analyze for inorganic and organic analytes. Otherwise the quarterly sampling only consisted of field parameters such as depth to water, pH, temperature and bottom of well elevation. In 1998 an additional 2 piezometers were required to be installed to determine groundwater flow. A Certificate of Completion of Post-Closure Care of the Henry Hoffman Landfill was granted and issued on December 22, 2005. Throughout the post-closure period, there were no violation notices issued for water quality standards, therefore it is presumed that no contaminants were detected at elevated levels.

Section 4.0 Pathway Discussion

4.1 Groundwater Migration Pathway

Geology of the Henry Hoffman Landfill is characterized by 10-130 feet of glacial drift, consisting of sands, gravels, silts and clays. Underlying the glacial drift are bedrock formations of the Pennsylvanian System ranging from approximately 40 to 360 feet. The Niagaran and Alexandrian Series of the Silurian System at approximately 140 feet are found underneath the glacial drift. Continuing for 190 feet below this system are shale and dolomite of the Maquoketa Group. This group is generally not considered to be a good water yielding zone. Underlying the Maquoketa Group is Galena-Platteville dolomite which is approximately 220 feet thick. Glenwood-St. Peter Sandstone which is approximately 180 feet deep underlies the Galena-Plateville dolomite. Found below this formation are dolomites and sandstones of the Prairie Du Chien. The Trempealeau, Franconia, Ironton-Galesville and Eau Claire of the Cambrian System underlie the Prairie Du Chien.

The municipal wells of Rock Falls draw water from the sands and gravels of the glacial drift. The wells range in depth from 70 to 145 feet and are located approximately one and a half and two and a half miles to the south of the site. The groundwater flow from the site is northwest towards the Rock River.

The City of Sterling located across the Rock River to the north has its water supplied by Illinois American-Sterling. Three of these wells are located approximately one and a half miles north of the site. Four more are found approximately three miles northeast of the site. Two of these wells are finished in the glacial drift to a depth of 83 and 86 feet and the remaining five draw water from the Cambrian System and range from 1434-1830 feet in depth. The two wells that are in the same aquifer as the monitoring wells and a located approximately one and a half miles away; are separated by the Rock River. The seven wells located in the City of Sterling

serve approximately 15,500 residents according to Illinois EPA. According to the Illinois EPA Source Water Assessment Program Fact Sheets VOC contamination has been detected in at least one of the Community Water Supply Wells. In 2009 the Illinois Department of Public Health issued a right to know notification informing residents that obtained there water from private wells that they should have their wells tested for VOC contamination. According to sampling done in the past of the community water supply wells; VOC contamination was the only contaminants of concern. This VOC contamination was not associated with COC's from the monitoring wells.

The majority of the nearby private wells located in Rock Fall and Sterling are finished in sands and gravels of glacial drift and limestone of the Pennsylvanian System. Log borings recorded for Henry Hoffman landfill indicate that water levels on site begin at approximately 22 feet. The nearest private well is located approximately ¼ mile to the south on the south side of Route 30. It was confirmed from the City of Rock Falls water department manager that there are residents still on private wells but he could not confirm that these residents drink the water. This area is not part of the city limits of Rock Falls. City water is planned for the near future for these residents.

Groundwater wells located within a 4-Mile radius

Distance	CWS Well/Population	ISGS well	Population
0-1/4	0	0	4
¼-1/2	0	1	2

½-1 mile	3/200	37	167
1-2 mile	5/15710	103	939
2-3 mile	7/10624	152	2122
3-4 mile	2/15710	122	417

ISGS well information from ArcView well data

4.2 Surface Water Pathway

The surface water pathway was listed as a potentially affected pathway in the Site Inspection due to potential groundwater migration to the Rock River. Although based upon over 20 years of quarterly monitoring well results that did not result in exceedances of contaminants it is not thought that the surface water pathway would be affected at this time. There were no discernable overland flow pathways that led from the site to a probable point of entry (PPE) into the river due to topography. The Rock River is located approximately ¼ mile to the north. The site is not part of the Rock River flood plain but is adjacent to the flood plain. It was not proved during the SI that the contaminants found in the sediment samples collected from the Rock River were attributable to the landfill.

Surface water drainage from Henry Hoffman Landfill is more likely to deposit into the 10-acre pond located onsite. The pond is used for private fishing. It is more likely that groundwater discharges to the 10-acre pond. The probable point of entry into the 10-acre pond is along the northern portion of the pond.

The only known sensitive environments in the region are wetlands (Illinois EPA 1991). The 10-acre pond is classified as a Palustrine Unconsolidated Bottom permanently flooded and excavated wetland. The Rock River is located ¼ to the north and classified as Riverine Lower Perennial Unconsolidated Bottom Permanently Flooded. Although there are two wetlands, they

are not of the type to be evaluated using the Hazard Ranking System. Based upon Illinois EPA data, there are no known surface water intakes within fifteen miles downstream of the site along the Rock River.

4.3 Soil Exposure

The Henry Hoffman Landfill site is located in an undeveloped area surrounded by farm land. During a reconnaissance to the site it was noted that it was covered in clover and the landfill was not observable to the naked eye. There were no leachate seeps going into the 10-acre pond that was observed. The possibility for exposure is minimal since the former landfill has been covered by clean fill material. The site is obstructed by a fence crossing the road to the site and no trespassing signs are also posted. The site has been covered by clean fill for approximately 30 years. The boundaries on either side of the landfill are farm fields and the 10-acre pond to the south. There are no daycare facilities, school or residents within a half a mile of the site. The possibility for trespassers is high due to no fence surrounding the entire property, only a gate across the entrance road. Population data for a one-mile radius around Henry Hoffman Landfill is included in the following table.

Population Distribution

Distance	Population
0-1/4 mile	0
¼-1/2 mile	4
½-1 mile	422

2010 Census data using Arcview population data

4.4 Air Pathway

There have been no documented reports, records or complaints of air releases from the site. There have been no air samples collected in the past and is not thought to be of concern at this time.

5.0 Summary and Conclusion

Henry Hoffman Landfill was originally placed on the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) now known as Superfund Enterprise Management System (SEMS) on August 28, 1990. Past activities at the unpermitted landfill included the disposal of fill of unknown material within 3 pits. The three pits were originally excavated in the 1970's and used to extract gravel. In the 1980's the three pits were backfilled with dirt, cement, brick, block and other solid fill material. Wood material was not allowed.

In 1988, Mr. Hoffman, working with Illinois EPA, submitted a closure plan for the unpermitted landfill. The closure plan included controlling access to the site, seeding and grading of the site and the installation of monitoring wells. On March 4, 1991 the closure plan was completed and entered 15-year post closure plan that expired December 22, 2005. The three monitoring wells were sampled on a quarterly basis for 15 years and were in compliance throughout the 15-year period.

During the Site Reassessment reconnaissance, it was noted that the fence restricting access from the road to the site was still in place. There did not appear to be any leachate seeps going into the 10-acre pond or other ponds. The business closest to the landfill is Hartland Controls, which manufactures merchandise for the HVAC industry. This business was founded in 2002

and is not thought to have contributed to the Henry Hoffman Landfill activities. The nearest resident is approximately ½ mile to the south of the landfill. The requirements set forth in the closure plan for the Henry Hoffman landfill were met in 1991. The post closure plan, including quarterly ground water monitoring, was completed in 2005. During that time all requirements were satisfied, there were no violations, monitoring had ceased, and Illinois EPA no longer had an interest in the site. Since there were no violations, the risk posed to the surrounding area appears to be minimal.

6.0 References

- CERCLA Preliminary Assessment Report. September 9, 1991. 82 pages.
- CERCLA Screening Site Inspection. June 22, 2002. 54 pages.

FIGURES

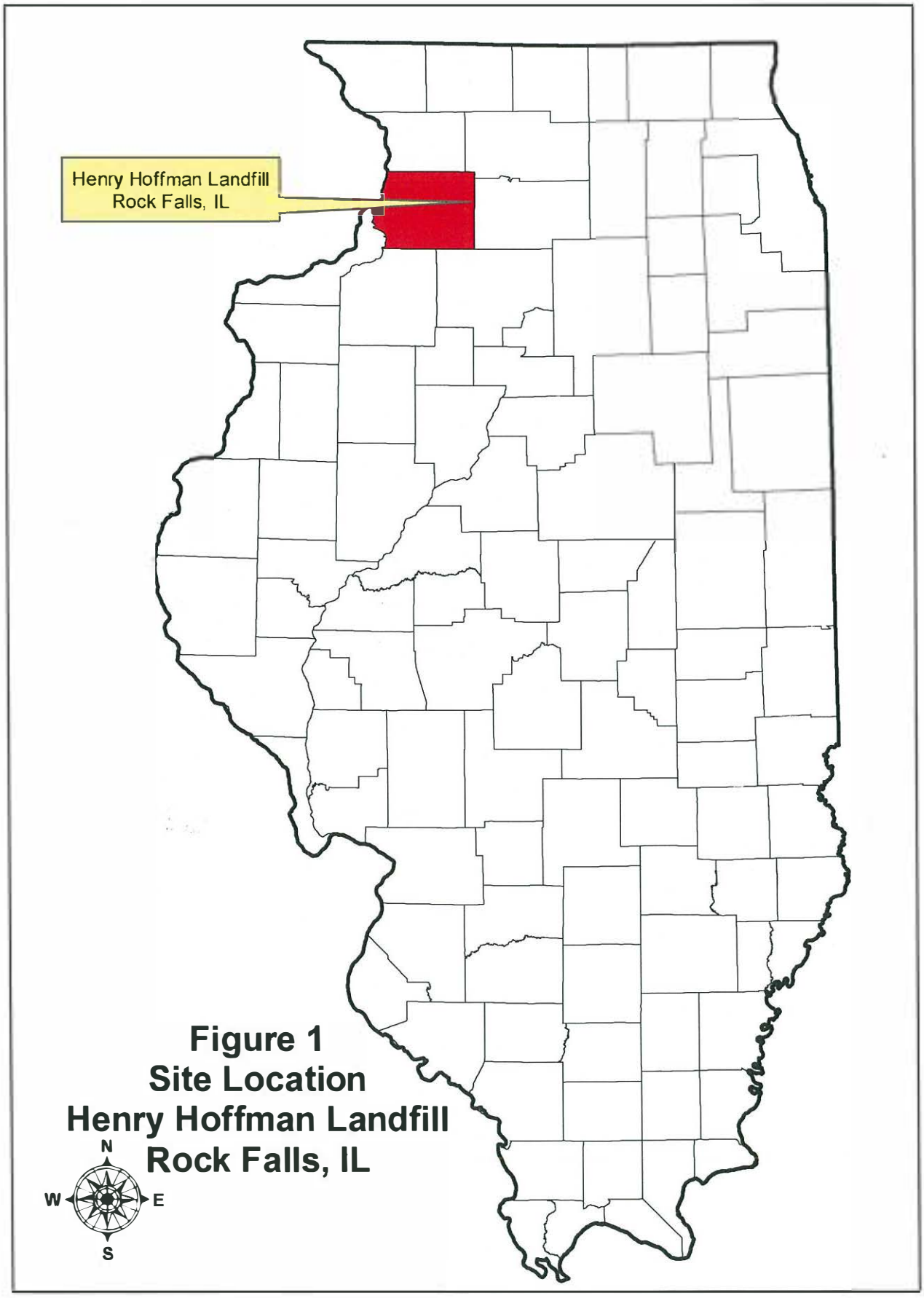


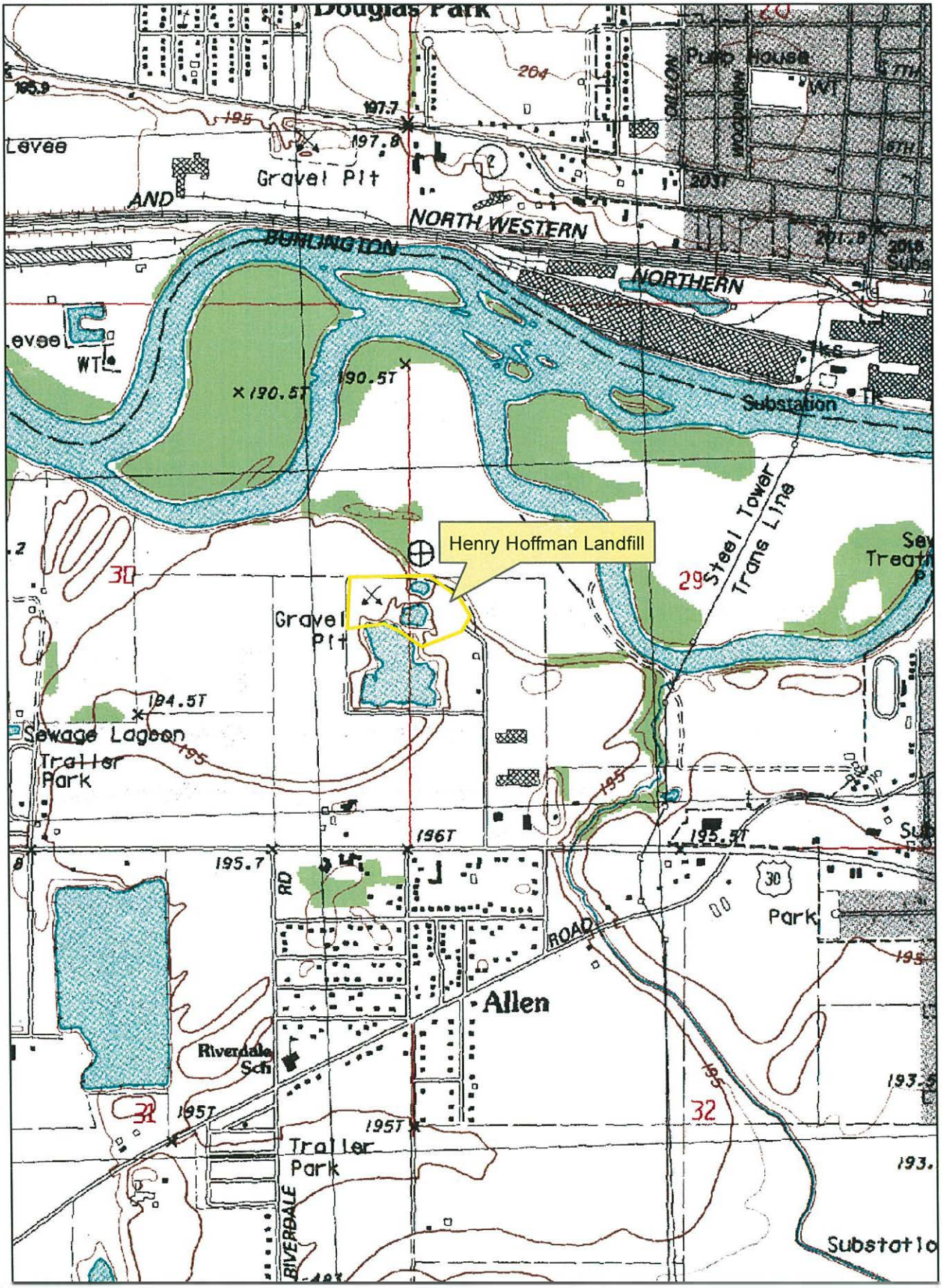
Figure 1
Site Location
Henry Hoffman Landfill
Rock Falls, IL

Figure 2
Henry Hoffman Landfill
Rock Falls, IL

Figure 3
Wetland Map
Henry Hoffman Landfill

Figure 4
ISGS Wells within a 4 Mile Radius

Figure 5
Topographic Map



APPENDICES

Illinois Environmental Protection Agency — Well Completion Report

te #: 1958130002 County WHITESIDE Well # G101

e Name: HOFFMAN LANDFILL Grid Coordinate: Northing _____ Easting _____

Contractor: TESTING ENGINEERS, INC. Date Drilled Start: 8-17-89

iller: PATRICK J. HARMON Geologist: JEFFREY L. MARTIN Date Completed: 8-17-89

illing Method: HOLLOW STEM AUGERS Drilling Fluids (type): NONE

nnular Space Details

pe of Surface Seal: CONCRETE

pe of Annular Sealant: CEMENT/BENTONITE GROUT

Amount of cement: # of bags 6.0 lbs per bag 94/cu. yd.

Amount of bentonite: # of bags 1.2 lbs per bag 50/cu. yd.

pe of Bentonite Seal (Granular, Pellet): PELLET

ount of bentonite: # of Bags 0.5 lbs. per bag 50

e of Sand Pack: CAVE-IN

rce of Sand: CAVE-IN

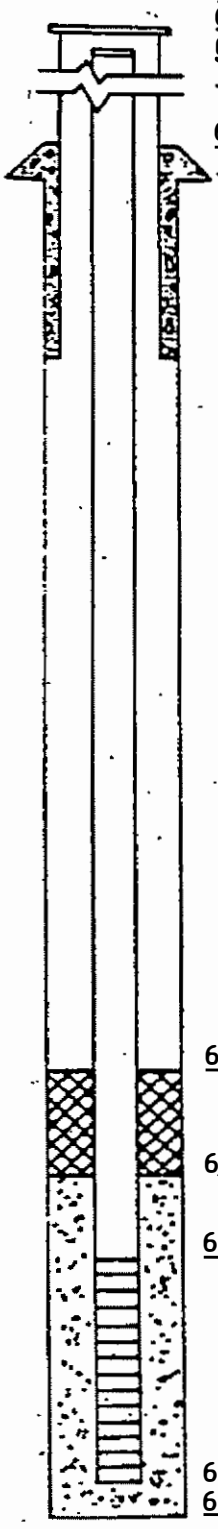
Amount of Sand: # of bags _____ lbs. per bag _____

ll Construction Materials

	Stainless Steel Specify Type	Teflon Specify Type	PVC Specify Type	Other Specify Type
er coupling joint			Tri-Loc	
er pipe above w.t.			Tri-Loc	
er pipe below w.t.			Tri-Loc	
een			Tri-Loc	
pling joint screen to riser			Tri-Loc	
tective casing				Steel

asurements to .01 ft. (where applicable)

er pipe length	28.08
tective casing length	5.0
een length	5.0
tom of screen to end cap	0.5
of screen to first joint	0.0
al length of casing	5.0
een slot size	0.010"
enings in screen	
meter of borehole (in)	7
of riser pipe (in)	2



Elevations — .01 ft.

639.71 MSL Top of Protective Ca

639.71 MSL Top of Riser Pipe

3.08 ft. Casing Stickup

636.63 MSL Ground Surface

6.58 ft. Top of annular sealan

630.05 ft. Top of Seal

2.42 ft. Total Seal Interval

627.63 ft. Top of Sand

616.75 ft. Top of Screen

5.0 ft. Total Screen Interv

611.75 ft. Bottom of Screen

610.13 ft. Bottom of Borehole

pleted by: JEFFREY MARTIN Surveyed by: Bernard H Klingenberg Ill. registration # 2755

MONITORING WELL DATA

MONITORING WELL NO. G101
HOFFMAN LANDFILL
SITE #1958130002
WHITESIDE COUNTY, ILLINOIS
AUGUST, 1989

LENGTH OF SCREENED SECTION	5.0	FT.
TIP AT ELEVATION	611.75	
TOTAL LENGTH OF RISER PIPE & SCREEN	27.96	FT.
TOP OF PIPE ELEVATION	639.71	
TOP OF CASING ELEVATION	639.71	
CASING STICKUP ABOVE GROUND.	3.08	FT.

SUMMARY OF WATER LEVEL MEASUREMENT

	WATER ELEVATION	DATE
WHILE DRILLING	613.63	8-17-89
ON COMPLETION	613.73	8-17-89
AFTER BAILING (DEVELOPMENT)	611.75	8-18-89
AFTER 0.5 HOURS	614.04	8-18-89
AFTER ____ DAYS		
AFTER ____ DAYS		
AFTER ____ DAYS		
AFTER ____ DAYS		
AFTER ____ DAYS		
AFTER ____ DAYS		
AFTER ____ DAYS		

testing engineers, inc.
1417 CHICAGO AVENUE P.O. BOX 548 OIXON, ILLINOIS 61021 PHONE (815) 288-1489
57 AIRPORT DRIVE ROCKFORD, ILLINOIS 61109 PHONE (815) 964-6030
FOUNDATION BORINGS AND REPORTS
MATERIAL TESTING AND REPORTS
SOIL SURVEYS AND ANALYSIS

LOG OF BORING NO. G101

PROJECT HOFFMAN LANDFILL; 1958130002 - WHITESIDE COUNTY JOB NO. 2401

OWNER HENRY HOFFMAN ORDER NO.

ARCHITECT-ENGINEER WILLETT, HOFMANN & ASSOCIATES, INC.

LOCATION 173'S., 454'E. OF NW CORNER OF SW 1/4 OF SEC. 29, T. 21N., R. 7E. OF THE 4TH P.M., WHITESIDE COUNTY, ILLINOIS

DATUM U.S.G.S.

ELEV.	SOIL DESCRIPTION	DEPTH	SAMPLE NO.	SAMPLE TYPE	DIST. REC.	N	γ	Q_u	w%
636.6	Dark brown SILTY SAND	0.0							
635.1	Brown SAND, trace silt, some fine gravel	1.5							
632.1	Very stiff dark brown and brown SANDY CLAYEY SILT, trace gravel	4.5	1	SS	X X	10		2.2 P	15.6
629.1	Stiff gray and brown SANDY SILTY CLAY	7.5							
		10	2	SS	X X	7		1.1 P	22.8
624.6		12.0							
	Very stiff brown SILTY CLAY, trace sand	15	3	SS	X X	11		2.2 P	18.4
617.6		19.0							
	Stiff brown and dark gray ORGANIC SILTY CLAY, trace sand		4	SS	X X	7		1.4 P	38.2
613.6		23.0							
	Loose gray medium and coarse SAND and fine and medium GRAVEL	25	5	SS	X X	7			
610.1		26.5							
	END OF BORING								

Drilled By PJH Checked JLM
Inspector
Boring Started 8-17-89
Boring Completed 8-17-89

WATER LEVELS
While Drilling -23.0' (613.6)
On Completion -22.9' (613.7)
After 5 Hours -22.4' (614.2)

Illinois Environmental Protection Agency — Well Completion Report

1958130002 — County: WHITESIDE — Well #: G102

Name: HOFFMAN LANDFILL — Grid Coordinate: Northing _____ Easting _____

ng Contractor: TESTING ENGINEERS, INC. — Date Drilled Start: 8-17-89

r: PATRICK J. HARMON — Geologist: JEFFREY L. MARTIN — Date Completed: 8-17-89

ng Method: HOLLOW STEM AUGERS — Drilling Fluids (type): NONE

ular Space Details

of Surface Seal: CONCRETE

of Annular Sealant: CEMENT/BENTONITE GROUT

mount of cement: # of bags 6.0 lbs. per bag 94/cu. yd.

mount of bentonite: # of bags 1.2 lbs. per bag 50/cu. yd.

of Bentonite Seal (Granular, Pellet): PELLET

t of bentonite: # of Bags 0.5 lbs. per bag 50

f Sand Pack: CAVE-IN

of Sand: CAVE-IN

nount of Sand: # of bags _____ lbs. per bag _____

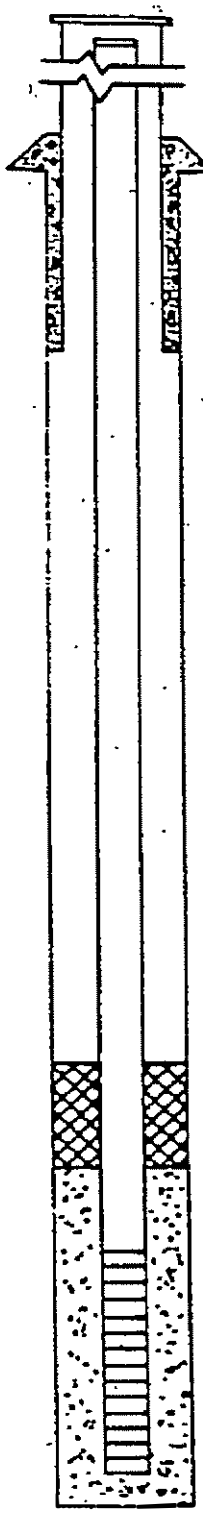
Construction Materials

	Stainless Steel Specify Type	Teflon Specify Type	PVC Specify Type	Other Specify Type
coupling joint			Tri-Loc	
pipe above w.t.			Tri-Loc	
pipe below w.t.			Tri-Loc	
			Tri-Loc	
ng joint screen to riser			Tri-Loc	
tive casing				Steel

urements

to .01 ft. (where applicable)

pipe length	27.67
tive casing length	5.0
length	5.0
n of screen to end cap	0.5
screen to first joint	0.0
length of casing	5.0
slot size	0.010"
penings in screen	
ter of borehole (in)	7
riser pipe (in)	2



Elevations — .01 ft.

639.05 — MSL Top of Protective Casi

639.05 — MSL Top of Riser Pipe

2.75 — ft. Casing Stickup

636.30 — MSL Ground Surface

14.75 — ft. Top of annular sealant

621.55 — ft. Top of Seal

2.17 — ft. Total Seal Interval

619.38 — ft. Top of Sand

616.80 — ft. Top of Screen

5.0 — ft. Total Screen Interval

611.80 — ft. Bottom of Screen

609.80 — ft. Bottom of Borehole

ted by: JEFFREY L. MARTIN — Surveyed by: Bernard H Klingenberg — Ill. registration #: 2755

MONITORING WELL DATA

MONITORING WELL NO. G102
HOFFMAN LANDFILL
SITE #1958130002
WHITESIDE COUNTY, ILLINOIS
AUGUST, 1989

LENGTH OF SCREENED SECTION	5.0	FT.
TIP AT ELEVATION	611.80	
TOTAL LENGTH OF RISER PIPE & SCREEN	27.25	FT.
TOP OF PIPE ELEVATION	639.05	
TOP OF CASING ELEVATION	639.05	
CASING STICKUP ABOVE GROUND.	2.75	FT.

SUMMARY OF WATER LEVEL MEASUREMENT

	WATER ELEVATION	DATE
WHILE DRILLING	612.30	8-17-89
ON COMPLETION	613.80	8-17-89
AFTER BAILING (DEVELOPMENT)	614.30	8-18-89
AFTER____HOURS		
AFTER____DAYS		
AFTER____DAYS		
AFTER____DAYS		
AFTER____DAYS		
AFTER____DAYS		
AFTER____DAYS		
AFTER____DAYS		

testing engineers, inc.
1417 CHICAGO AVENUE P.O. BOX 548 DIXON, ILLINOIS 61021 PHONE (815) 288-1489
57 AIRPORT DRIVE ROCKFORD, ILLINOIS 61109 PHONE (815) 964-6330
FOUNDATION BORINGS AND REPORTS
MATERIAL TESTING AND REPORTS
SOIL SURVEYS AND ANALYSIS

LOG OF BORING NO. G102

PROJECT HOFFMAN LANDFILL; 1958130002 - WHITESIDE COUNTY JOB NO. 2401

OWNER HENRY HOFFMAN ORDER NO.

ARCHITECT-ENGINEER WILLETT, HOFMANN & ASSOCIATES, INC.

LOCATION 101'S., 585'W. OF NE CORNER OF SE 1/4 OF SEC. 30, T. 21N., R. 7E. OF THE 4th P.M., WHITESIDE COUNTY, ILLINOIS

DATUM U.S.G.S.

ELEV.	SOIL DESCRIPTION	DEPTH	SAMPLE NO.	SAMPLE TYPE	DIST.	REC.	N	γ	Q_u	w%
636.3	Dark brown CLAYEY SILT,	0.0								
634.8	trace sand	1.5								
633.3	SEE NOTE 1	3.0								
632.3	Brown GRAVELLY SANDY CLAY	4.0								
			1	SS	X	X	13			
	Medium to dense light brown medium and coarse SAND and GRAVEL	10	2	SS	X	X	35			
		15	3	SS	X	X	25			
616.8		19.5								
	Medium fine and medium SAND, trace to some gravel		4	SS	X	X	29			
609.8		26.5	5	SS	X	X	27			
	END OF BORING									

Drilled By PJH Checked JLM
Inspector
Boring Started 8-17-89
Boring Completed 8-17-89
Sheet 1 of 1 Sheets

TEI

WATER LEVELS
While Drilling -24.0' (612.3)
On Completion -22.5' (613.8)
After 24 Hours -21.8' (614.5)
After ___ Hours ___

Illinois Environmental Protection Agency

Well Completion Report

te #: 1958130002 County WHITESIDE Well # G103

ame: HOFFMAN LANDFILL Grid Coordinate: Northing _____ Easting _____

illing Contractor: TESTING ENGINEERS, INC. Date Drilled Start: 8-17-89

iller: PATRICK J. HARMON Geologist: JEFFREY L. MARTIN Date Completed: 8-17-89

illing Method: HOLLOW STEM AUGERS Drilling Fluids (type): NONE

nnular Space Details

pe of Surface Seal: CONCRETE

pe of Annular Sealant: CEMENT/BENTONITE GROUT

Amount of cement: # of bags 6.0 lbs. per bag 94/cu. yd.

Amount of bentonite: # of bags 1.2 lbs. per bag 50/cu. yd.

pe of Bentonite Seal (Granular, Pellet): PELLET

ount of bentonite: # of Bags 0.5 lbs. per bag 50

e of Sand Pack: CAVE-IN

ze of Sand: CAVE-IN

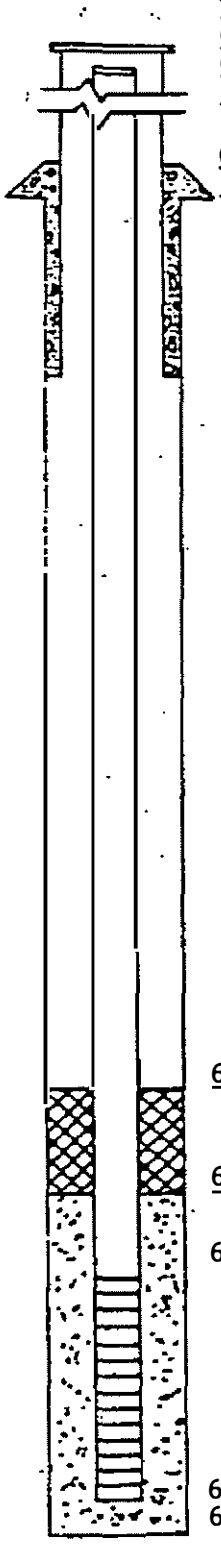
Amount of Sand: # of bags _____ lbs. per bag _____

Construction Materials

	Stainless Steel Specify Type	Teflon Specify Type	PVC Specify Type	Other Specify Type
ser coupling joint			Tri-Loc	
ser pipe above w.t.			Tri-Loc	
ser pipe below w.t.			Tri-Loc	
reen			Tri-Loc	
upling joint screen to riser			Tri-Loc	
otective casing				Steel

asurements to .01 ft. (where applicable)

er pipe length	29.75
tective casing length	5.0
een length	5.0
ttom of screen to end cap	0.5
p of screen to first joint	0.0
tal length of casing	5.0
ot slot size	0.010"
enings in screen	
meter of borehole (in)	7
of riser pipe (in)	2



Elevations — .01 ft.

640.41 MSL Top of Protective Ca
640.41 MSL Top of Riser Pipe
2.75 ft. Casing Stickup

637.66 MSL Ground Surface
16.25 ft. Top of annular sealan

621.41 ft. Top of Seal
2.08 ft. Total Seal Interval
619.33 ft. Top of Sand

616.16 ft. Top of Screen
5.0 ft. Total Screen Interv

611.11 ft. Bottom of Screen
608.66 ft. Bottom of Borehole

pleted by: JEFFREY L. MARTIN Surveyed by: Bernard H Klingenberg Ill. registration # 2755

MONITORING WELL DATA

MONITORING WELL NO. G103
HOFFMAN LANDFILL
SITE #1958130002
WHITESIDE COUNTY, ILLINOIS
AUGUST, 1989

LENGTH OF SCREENED SECTION	5.0	FT.
TIP AT ELEVATION	610.66	
TOTAL LENGTH OF RISER PIPE & SCREEN	29.25	FT.
TOP OF PIPE ELEVATION	640.41	
TOP OF CASING ELEVATION	640.41	
CASING STICKUP ABOVE GROUND.	2.75	FT.

SUMMARY OF WATER LEVEL MEASUREMENT

	WATER ELEVATION	DATE
WHILE DRILLING	613.66	8-17-89
ON COMPLETION	614.58	8-17-89
AFTER BAILING (DEVELOPMENT)	614.74	8-18-89
AFTER____HOURS		
AFTER____DAYS		
AFTER____DAYS		
AFTER____DAYS		
AFTER____DAYS		
AFTER____DAYS		
AFTER____DAYS		
AFTER____DAYS		

testing engineers, inc.
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57 AIRPORT DRIVE ROCKFORD, ILLINOIS 61109 PHONE (815) 964-8030

LOG OF BORING NO. G103

PROJECT HOFFMAN LANDFILL; 1958130002 - WHITESIDE COUNTY JOB NO. 2401

OWNER HENR HOFFMAN ORDER NO.

ARCHITECT-ENGINEER WILLETT, HOFMANN & ASSOCIATES, INC.

LOCATION 504'S., 585'W. OF NE CORNER OF SE 1/4 OF SEC. 30, T. 21N., R. 7E. OF THE 4TH P.M., WHITESIDE COUNTY

DATUM U.S.G.S.

ELEV.	SOIL DESCRIPTION	DEPTH	SAMPLE NO.	SAMPLE TYPE	DIST.	REC.	N	γ	Q_u	w%
637.7	Brown medium and coarse SAND and GRAVEL	0.0								
635.2	Dark brown GRAVELLY CLAYEY SAND	2.5								
633.2	Medium brown fine and medium SAND, trace gravel	4.5	1	SS	X	X	13			
629.7	Medium light brown medium and coarse SAND and GRAVEL	8.0								
		10	2	SS	X	X	18			
623.2	Medium brown SAND, some fine and medium gravel	14.5	3	SS	X	X	27			
617.7	Medium brown SAND and GRAVEL	20.0	4	SS	X	X	26			
		25	5	SS	X	X	22			
608.7	END OF BORING	29.0	6	SS	X	X	28			

Drilled By PJH Checked JLM
Inspector
Boring Started 8-17-89

WATER LEVELS
While Drilling -24.0' (613.7)
On Completion -23.1' (614.6)